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42. (New) The process of claim 21 wherein said criterion is selected from the group consisting of cost, speed and quality.

REMARKS

The Office Action dated August 11, 2000, has been received and carefully reviewed.

Claims 2, 3, 5, 9, 11, 15, 16, 19-22, 24 and 26-32 were pending prior to the entry of the above amendment. By the above amendment, claims 2, 3, 5, 9, 11, 15, 16, 19, 20, 22, 24, and 26-31 have been canceled and new claims 33-42 have been added. Therefore claims 21 and 32-42 are now pending in this application. Claims 21, 32 and 33 are independent.

All pending claims stand rejected under 35 U.S.C. 102(b) as being anticipated by Parad. The differences between Applicant's invention and the Parad invention are discussed in general terms below. A comparison of Parad to the invention required by each of Applicant's claims follows that general discussion.

Both Parad and the claimed invention are directed to systems that deploy resources on an ongoing basis. When an error occurs or a situation changes, both systems take the change into account and continue carrying out jobs. However, the claimed system is an improvement over Parad because, in

responding to events, it determines the optimum deployment of resources while Parad deploys resources in a manner that should be acceptable but will not necessarily be optimal.

Parad starts with a schedule. Beneficially, the Parad system is said to generate a schedule in under an hour using a PC type processor rather than in 6 hours on a mainframe type processor as was previously necessary (column 4, first full paragraph). Thus, Parad's initial schedule should be the optimal schedule for performing a given set of jobs assuming everything goes as planned and no problems arise. However, Parad does not recalculate an optimized schedule in response to error conditions. This would require nearly an hour of processing time. Parad instead responds to changing conditions as best it can, but cannot do so in an optimized way.

The present applicant has found a way to respond to changing conditions in an optimized way. Because the claimed invention does not rely upon a predetermined schedule, there is no need to recalculate a schedule each time conditions change. Rather, the claimed system continuously evaluates the resources that are available, the jobs that are to be performed and criteria associated with each job, and assigns resources in an optimal manner.

The following example further illustrates the differences between the claimed invention and the system disclosed in the

Parad reference:

Parad calculates an optimal schedule for performing a number of jobs with a set of resources. While the jobs are being performed by the resources, a first error occurs, and Parad's system responds by changing the original schedule to accommodate the error. Second and third errors occur, and Parad's system responds similarly. All jobs are eventually completed and the system stops. The outcome will not be optimal, because Parad could not recalculate optimal outcomes when each error occurred. In other words, the job performance described above would have been different had the system stopped each time an error occurred and spent nearly an hour recalculating an optimal schedule based on the new information. The Parad system, however, cannot perform optimizing calculations fast enough to function in real time.

The claimed system performs an ongoing optimization simulation. This ensures that the system responds to changing conditions in an optimal fashion. Neither system recalculates an entire schedule when conditions change, but the claimed invention produces the same results that would obtain if such a recalculation were performed. Because Parad only calculates an optimal schedule once, initially, the claimed invention is not suggested by the prior art.

Claim 21 stands rejected under 35 U.S.C. 102(b) as being anticipated by Parad. Claim 21 requires a process comprising

an ongoing optimization-simulation for simulating an optimal deployment of resources. Parad does not show or suggest a system that performs an ongoing optimization simulation.

Instead, as discussed above, Parad only optimizes the use of resources once, and this takes nearly an hour. Thereafter, the Parad system deploys resources on a basis that is not necessarily optimal. This difference is discussed further in the International Preliminary Examination Report wherein the international examiner found the disclosed invention as then claimed to be allowable over the Parad reference.

Claims 33-42 depend from claim 21 and are therefore allowable for the same reasons as claim 21.

Claim 32 stands rejected under 35 U.S.C. 102(b) as being anticipated by Parad. Claim 32 requires that, on an ongoing basis, resources be selected and activated based on given criteria and based on the resource properties and resource statuses to accomplish all of said plurality of jobs in an optimal manner. The system of Parad does not select and activate resources on an ongoing basis in order to accomplish a plurality of jobs in an optimal manner. Instead, Parad calculates an optimal use of resources one time, and, if conditions change, does not recalculate optimal deployments. For these reasons, claim 32 is also believed to be allowable over the prior art.

Newly added claim 33 also requires that an optimal job

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sequence for each resource be determined on an ongoing basis, taking into account all pending jobs and job priorities and job criteria and resources. Parad does not show this ongoing optimization simulation and therefore does not anticipate claim 33.

Each issue raised in the Office Action dated August 11, 2000, has been addressed, and it is believed that claims 21 and 32-42 are in condition for allowance. Wherefore, reconsideration and allowance of these claims is respectfully requested.

Respectfully submitted, Dennison, Scheiner, Schultz & Wakeman

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